

LONG ISLAND BOTANICAL SOCIETY NEWSLETTER

March - April 1995 Vol. 5, No. 2

In This Issue

Eric Lamont has contributed two articles for this issue. The first is about Fanny A. Mulford, a botanist in the Hempstead area around the turn of the century and the orchids she found on Long Island.

Eric Lamont's second contribution is excerpts from Roy Latham's letters and notes called "In the field with Roy Latham". This is expected to be an ongoing series.

We still need field trip leaders and ideas. The only field trip scheduled so far is to Pelham Bay Park in the Bronx on June 25, 1995. This trip will be led by Dave Kunstler. We will put more about this trip in the next newsletter.

Next Month: will be devoted to the Conifers of Long Island. The Flora Committee has been working on distribution maps and notes about this group. If you have any information and would like to contribute please call Skip Blanchard.

PROGRAMS

14 Mar 1995 - 7:30 pm, Steven Clements, "The New York Metropolitan Flora Project." Muttontown Preserve Nature Center, East Norwich. (For directions to Muttontown Preserve call 516/571-8500).

11 April 1995 - 7:30 pm, Dr. Marty Condon, "Natural History of Rain Forest Cucumbers." Muttontown Preserve Nature Center, East Norwich. (For directions to Muttontown Preserve call 516/571-8500).

• Refreshments are available starting at 7:30 pm; the meeting begins at 8 pm.

FANNY MULFORD'S ORCHID COLLECTIONS FROM' THE LATE 1890's



Liparis loeselii

On 2 June 1896, Fanny A. Mulford of Hempstead botanized the rich woods surrounding Hempstead Lake. During the previous few years she had meticulously prepared a modest collection of plants from near her home; ultimately, she would present future botanists with a detailed account of the flora of southwestern Nassau County at the turn of the century. On this fine spring day Fanny planned to visit a site where she had previously collected the Pink Lady's-slipper (*Cypripedium acaule*).

As she walked through the woodland her attention was diverted to a plant which, at first glance, resembled a lily. Nearby was a second plant with pale purplish-brown flowers; her excitement was piqued by the discovery of the Lily-leaved Twayblade (*Liparis liliifolia*). She had heard that this rare orchid had been collected several times during the 1860's at Inwood, approximately six miles southwest of Hempstead Lake. She did not know that her collection would be the last report of this species from Nassau County; nor could she have imagined that in less than 100 years the Lily-leaved Twayblade would be considered extirpated from Long Island and extremely rare throughout New York State.

Two weeks later Fanny botanized at Cherry Valley, located less than one mile northwest of Hempstead Lake. The "valley" was little more than a slight depression in the Hempstead Plains, but the vegetation was unique. Cherry Valley was dotted with freshwater wetlands, a small lake was located near the valley's north end, and woody plants dominated the landscape. As Fanny

skirted through the shrub thickets and around the wet meadows she located a population of the Rose Pogonia, or Snake-mouth (*Pogonia ophioglossoides*). The specific name *ophioglossoides* means "like the Adder's-tongue," referring to the plant's single leaf which resembles the solitary leaf of *Ophioglossum*, the Adder's-tongue fern. It is interesting to note that Fanny may have shared her find with another local botanist, A. E. Hamilton, because on 4 July 1896, Hamilton collected the Rose Pogonia at a "swamp at Baldwin," just south of Hempstead. Today, all that remains of Cherry Valley is the highly manicured Cherry Valley Golf Links, and Adelphi University; but the small lake, where Fanny may have once collected orchids, still persists across the street from the Cathedral School of St. Paul.

Fanny Mulford may have been in contact with another local botanist, J. McCallum. As previously mentioned, on 2 June 1896 Fanny collected the Lily-leaved Twayblade near Hempstead Lake. On 5 June 1896, McCallum collected Loesel's Twayblade (*Liparis loeselii*) on the Rockaway Peninsula of southern Queens County; the voucher specimen, deposited at the Brooklyn Botanic Garden, represents McCallum's first collection of an orchid species. On 27 June 1896, Fanny traveled to Rockaway Park and also collected Loesel's Twayblade. Did Fanny contact McCallum about her Twayblade discovery at Hempstead, and did he respond by searching his neck of the woods only to find a different species which he in turn shared with Fanny? We do know that Fanny Mulford's most active years of plant collecting occurred from approximately 1895 to 1905. McCallum's major collections were from 1903 to 1913; he began collecting at the western end of Long Island and eventually moved east to areas near Bayshore, Islip, Smithtown, and Yaphank. It appears that Fanny Mulford may have been a positive influence upon the early botanical endeavors of J. McCallum.

On 17 July 1896, Fanny returned to the vicinity of Hempstead Lake. From this botanical excursion, Fanny is credited with the first Nassau County collection of the Green Adder's-mouth (*Malaxis unifolia*). In 1902 Fanny revisited the site and once again collected this small and inconspicuously flowered orchid. On 4 July 1903 Eugene Bicknell collected this species from a "mossy bank in the woods, on the east side of Hempstead Reservoir." William Ferguson collected the last Nassau County specimen of this orchid from "Massapequa, in rather dry woods near swamp," on 17 July 1926.

The East Meadow portion of the Hempstead Plains was the focus of Fanny's collecting trip on 27 July 1896. Hidden among the tall prairie grasses were the delicate and lacy blossoms of the Ragged Fringed Orchid (*Platanthera lacera*), and along the shaded edges of a small creek grew the Little Club-spur Orchid

(*Platanthera clavellata*). Conspicuously swaying among the grasses were thousands of individuals of the Yellow Fringed Orchid (*Platanthera ciliaris*). William Ferguson would later write in 1925 that this orchid had been widespread throughout the Hempstead Plains. Today, the Yellow Fringed Orchid is considered extirpated from western Long Island, Staten Island, and Westchester County; only a few small populations precariously survive at the east end of Long Island.

During this same period of time, A. E. Hamilton was also busy collecting orchids in the nearby vicinity. On 24 June 1896 Hamilton collected the Little Club-spur Orchid, on 1 July 1896 he collected the Ragged Fringed Orchid, and on 4 July 1896 he collected the White Fringed Orchid (*Platanthera blephariglottis*); all three collections were from the vicinity of Baldwin. On 28 July 1896, Fanny Mulford collected the White Fringed Orchid at Hempstead Gardens, located adjacent to the northwestern portion of Hempstead Lake. Once again, was Fanny and other local botanists sharing information on the flowering dates and habitats of these orchids?

On 21 August 1896, Fanny located a group of delicate Ladies'-tresses (*Spiranthes*) growing in dry, sandy soil at Garden City. Upon close examination she noted that some plants had white flowers with a large green central spot on the lip, while other plants had pure white flowers. When she carefully dug up some plants she noted that the individuals with pure white flowers had a single root (*S. tuberosa*), whereas the plants with green-spotted flowers had several roots (*S. lacera* var. *gracilis*). On 2 September 1896, at a mesic site near Hempstead Reservoir, Fanny located a taller, more robust species of *Spiranthes*, the Nodding Laddies'-tresses (*S. cernua*).

During the years 1897 through 1900 Fanny Mulford made only sporadic orchid collections. Maybe she did not want to exploit these rare wildflowers by overcollecting them. She continued to collect species previously unreported from the area, but she rarely collected the same species twice. Her additions to the orchid flora of Nassau County are as follows: Dragon's-mouth (*Arethusa bulbosa*), Meadowbrook, 15 July 1897; Downy Rattlesnake Plantain (*Goodyera pubescens*), Hempstead, 12 August 1898; Grass-pink (*Calopogon tuberosus*), Meadowbrook, 26 August 1898; Spotted Coral-root (*Corallorrhiza maculata*), Searington, 30 August 1900; Large Whorled Pogonia (*Isotria verticillata*), Hempstead, without collection date. She did continue to collect species of the genus *Spiranthes* until 1906; possibly she, like many others, was uncertain of the identity of her *Spiranthes* collections.

Apparently, Fanny Mulford never again collected an orchid specimen, and her contributions in this specific field seemed to be ended. However, twelve years after

In her collection a significant botanical event occurred during her life. On 12 May 1918 Fanny's sister, Harriet Mulford, walked through the dry woods surrounding Hempstead Lake. She passed the familiar site where the Large Whorled Pogonia occurred, discovered almost 20 years earlier by her sister. But this time Harriet noted something different: two plants had flowers with short sepals less than one inch long, all the other plants had flowers with much longer sepals approximately two inches long. Upon closer inspection, she observed that the two plants with short, greenish-colored sepals also had stems that were a pale greenish color; all the other plants had long, widely spreading, purplish sepals, and purplish stems. Harriet must have rushed home in excitement to share her discovery with Fanny. The two women returned to the site and admired the Small Whorled Pogonia (*Isotria medeoloides*). The top portion of one plant was carefully removed, pressed, and preserved. This was the first of only two Long Island collections of the "rarest orchid east of the Mississippi." Today, the Small Whorled Pogonia is Federally listed as an endangered species; no extant populations are known in New York State.

In Norman Taylor's classic Flora of the Vicinity of New York, published by the New York Botanical Garden in 1915, several outstanding botanists are acknowledged in the preface. The distinguished list includes: Nathaniel Lord Britton, founder of the New York Botanical Garden, Merritt Lyndon Fernald, the eminent Harvard University Professor of Botany, Bayard Long, Roland Harper, and Arthur Hollick. Positioned among these names of botanical giants is the name of an unpretentious woman, Miss Fanny A. Mulford, acknowledged for her abilities as a gifted botanist.

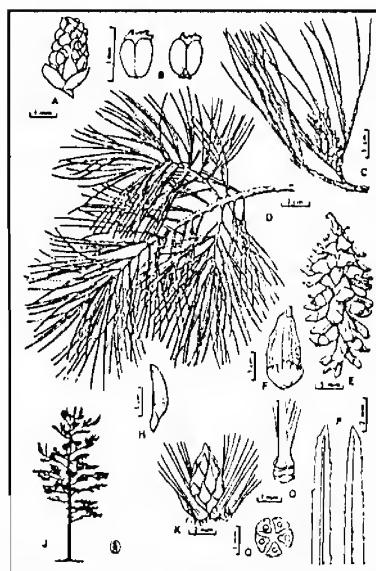
--Eric Lamont

Gardiner's Island Publication

The South Fork Natural History Society has recently published a 52 page account of the natural history of Gardiner's Island. The publication includes historical and current articles on vegetation, geology, birds, reptiles, amphibians, fishes, invertebrates, native Americans, the Gardiners, and much more. Almost every page includes a photograph, illustration, or map. The publication is free to members of the South Fork Natural History Society. For information, please call Carol Crasson at 516-267-7944.

In The Field With Roy Latham, #1

This article is the first of an anticipated series. The information that will be presented has been largely obtained from archival letters and other papers on file at the New York State Museum, the Southold Indian Museum, the New York Botanical Garden, and the New York Natural Heritage Program. Significant scientific information previously unpublished by Roy Latham will not be presented in this series (Latham's natural history collections continue to increase our understanding of New York State's biodiversity). Since the next issue of the Long Island Botanical Society newsletter will be devoted to conifers of Long Island, I herewith include Roy Latham's observations of Eastern White Pine (*Pinus strobus*) and Red Spruce (*Picea rubra*) on the North Fork of Long Island, New York.



Pinus strobus

24 November 1918
(Sunday)

I flivvered to Greenport at 8 am to explore the Vaccinium swamp that lies between Moores Woods and the Greenport school-house. Since last July, when Mr. Davis reported white pines from the swamp, I have sought an opportunit to investigate the region. Wearing hipboots, I entered the wetland from the

west and found a virgin swamp. The growth of shrubs was almost impenetrable at spots as I followed the narrow water course that snaked between hummocks crowded with shrubs. Often the water and oozy mud came above the knees.

My spirit ran high with delight as I reached the first tree of the white pine, and I immediately proclaimed it to be a pure native to the region. It was growing on one of the little rises of mucky land, the exposed roots were running across the waterways - a most unlikely place for the white pine. The first tree was 20 feet tall with a circumference of 36 inches, measured 4 feet above the ground. Near it was a sapling 4 feet high. Some fine large cones were collected and a specimen of the tree

was taken for my herbarium.

The locality surrounding this tree was a typical primeval swamp with a few maples from 20 to 30 feet in height and trunks 4 to 6 inches in diameter; The maples were a great deal older than they appeared, their age showed on the lichen coated barks. The under-growth consisted of swamp blueberry, swamp black alder, chokeberry, sweet pepperbush, a few catbriers, and rarely a bayberry. One bayberry was measured as follows: trunk 19.5 inches in circumference, measured 2 feet above the ground; height 20 feet. The general height of the Vaccinium and other shrubs was about 10 to 12 feet. The earth was covered with broom and sphagnum mosses.

Climbing the first pine, I counted 30 or more trees in the near vicinity to the eastward. Working toward the east I came to the main colony of pines but was grieved to find that many of the fine old pines had been badly mutilated by vandals, evidently the work of boys. The trunks of numerous trees had been hacked off by a dull edged ax, two or three feet above the ground. This had been done two or three years ago with the exception of one tree which had been cut the present season. I counted the rings of a one foot diameter trunk and placed the age of the tree in the neighborhood of 100 years. Just past the central part of the swamp, where the trees were the closest and thickest, practically all the fine trees had been cut and ruined; they had not been utilized, but laid there to rot and decay. To the naturalist they told a heart-braking story of waste and folly, there in the depths of the sink. At one spot I counted over thirty stumps in sight. I suppose this is no more than could be expected with a locality at the very edge of a large village like Greenport. Some of the nearer trees had been evidently carried out for firewood by the poor class that live on the south and eastern border of the site.

I would place the full number of trees in the swamp, cut, standing, and seedlings, between two and three hundred. There were a large number of one year old seedlings that were two to four inches high, and many others that were two years and older - some beautiful specimens, four to six inches high. It was extremely interesting to see the little things growing from the sides of the mossy banks, slanting out over the reflecting pool.

The tallest tree was 40 feet high, and several were at 30 feet. The largest trunk was 42.5 inches in circumference, measured 5 feet above the ground; another was 39.5 inches, with a uniform trunk diameter extending ten feet up from the ground to the first branch. A great many of the trees were heavily top branched. The largest cones were 4 to 5 inches long. Some fungi were collected from these trees for future study. One gray salamander was collected from under a pine log, along with a collection of pill-bugs. I observed evidence

of muskrats, a ruby-crowned kinglet, blue jays, chickadees, and goldfinches. Also seen were many catbird nests from last year, a few cuckoo's, and one crow's nest in a pine. I did some photography work with the pines, but all may be a failure due to the wind and darkness of the swamp.

It was such an interesting site, and a great record - white pine is a new species to the local flora. It is a pity that they cannot be preserved. What would be the use of telling about the site? To speak might be the means of doing more harm than good.

24 July 1920 (Saturday)

Norman Taylor and Dr. Gager from the Brooklyn Botanic Garden came out to Orient last night, and this afternoon we went to the Red Spruce station on Cid's Island. These are the only spruce trees known to occur as a true native on Long Island, and I am glad to have the honor of first discovering them. Taylor said that this is the most interesting botanical find on Long Island. After Taylor first came down to see the station a few years ago he told Dr. Britton who laughed at him and said he did not believe they were here.

The four large spruce trees in the island's woods makes this one of the most interesting bits of wild woodland in Orient. One of the old trees is dead and two are nearly dead; the fourth, a fine specimen, is beginning to die around the lower parts. I climbed to the top of this tree and found that it was covered with large green cones. I was most pleased to find four young seedlings from 10 to 22 inches in height and from 12 to 17 years old - the largest one a lovely little fellow with bright, glossy green foliage. A large cedar had been cut in the nearby woods and the rings showed it to be 125 years old.

These spruce trees are relicts of the conifer forest that once covered the island and are the last of their race. They seem to be fighting a losing battle.

Sunday, 25 July 1920: Taylor, Dr. Gager (who is 51 years old and Director of the Garden), and I went out for the day. We first went to Moores Woods and found three plants of *Tipularia* in bud. In the same woods we found clusters of what seemed to be yellow Indian Pipe, but the plants were bright yellow and seemed different - it was most interesting. Then we went to the Swamp Poplar trees west of Greenport, followed by a visit to the trees north of the Orchard House; they proved to be American Elm, the second station for Long Island, the other is way up in Queens County. We then visited the Magnolia trees in eastern Southold and went on to the Dunes which was new to them and is a most interesting and unique spot on the north shore of the island.

--Eric Lamont

Society News

January 10 meeting Members Night

Glenn Richard is looking for volunteers to lead field trips and/or suggest locations in the coming year. Suggestions can be given to Al Lindberg to co-chair.

Bob Laskowski showed "The Botany of Birdseed" with pictures of the traditional seeds and the plants they came from.

Vince Puglisi showed slides of a bird rookery off the south shore and some of Mitchell Field prairie - before and after.

Julius Hastings had some of his favorite slides - could you guess? - orchids.

Steven Clemants wound it up with a succession of exotic plants in Hawaii, Japan, Africa and South America.

February 14 meeting

Prof. Ray Welch presented a thought provoking talk on the changes in Long Island's vegetation since the retreat of the last continental glacier. Much of the historical information was based upon pollen data. Discussion eventually centered on past vegetation patterns of what we now call the "pine barrens." Several recent investigators have suggested that the Long Island pine barrens have been recently formed (during the past 250 years) as a result of human activity. Prof. Welch disputed these suggestions from evidence based on pollen analysis.

New Orchid Journal

The North American Native Orchid Alliance, a group dedicated to the conservation and promotion of our native orchids, has announced the publication of: "NORTH AMERICAN NATIVE ORCHID JOURNAL." Issue number one will be sent to members in March 1995, and will consist of informative articles, illustrations, orchid news, a checklist of North American orchids, index to 1994 orchid literature, book reviews, and extensive information about the North American Native Orchid Alliance. Paul Martin Brown is Editor-in-Chief of the journal.

Membership in the North American Native Orchid Alliance, which includes a subscription to the Journal, is \$22 per year and should be sent to Nancy Webb, 84 Etna Street, Brighton, MA 02135. Membership/subscriptions received prior to 1 June 1995 will be offered at a special price of only \$18 for the first year.

Botanist Wanted

The Seaford Foundation in Islip recently was awarded a Return a Gift to Wildlife Program contract from the NYSDEC to develop an inventory of natural habitats, nature reserves, and protected areas in the New York City area and on Long Island. This project will be conducted with Geographic Information Systems (GIS) computer software. Satellite imagery data and aerial photography will be used as guides for mapping local vegetation types; however, groundlevel observations of major plant community types will be necessary to verify the maps. This procedure, which is sometimes called "ground-truthing," involves identification of common trees, shrubs, and grasses in relation to specific latitude and longitude locations. In most cases, latitude/longitude positions will be determined by use of a Global Positioning System (GPS) which receives the data from satellites orbiting the earth. A Long Island habitat inventory will indicate to NYSDEC which natural habitat type(s) need greater protection in order to preserve the region's biodiversity.

A botanist will be hired as a summer intern to assist in this project. A general knowledge of Long Island's common flora is required to identify major plant community types; the position does not require the ability to identify rare and confusing plant species. Students are welcome to apply. Interested applicants should contact: Dr. Margery Oldfield, Executive Director, The Seaford Foundation, P.O. Box 31, Islip, NY, 11751 [516/581-6908].

New Members

The Long Island Botanical Society is pleased to welcome the following new members:

Mindy Block, Port Jefferson; Lucille Blum, Huntington Station; Arthur Cooley, East Patchogue; Christine Engelhardt, Kings Park; Hank Foglino, Smithtown; Edward Fontana-Daguerre, Port Jefferson; Kathy Krause, Patchogue; JoAnne Larson, Franklin Square; David Lean, Hollis; Dianna Pollak, Whitestone; Steven Rubenstein, Farmingdale; Lynne & Mort Silver, Fresh Meadows; Bill Wilkinson, Riverhead; Marie Zazzi, East Hampton; John Zuzworsky, Broad Channel, N.Y.

L.I. Flower Show

LIBS will display its education exhibit at the Long Island Flower Show at the Nassau Coliseum from Thursday evening, 2 March to Sunday, 5 March. If you visit the flower show you may want to stop by and see our exhibit.

LONG ISLAND BOTANICAL SOCIETY

Founded: 1986; Incorporated: 1989.

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

President	Eric Lamont
Vice President	Steven Clemants
Treasurer	Carol Johnston
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Cor'sp Sec'y	Jane Blanchard
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	John Turner
Education	Mary Laura Lamont
Hospitality	Nancy Smith
	Betty Lotowycz
Program	Eric Lamont
Editor	Steven Clemants

Membership

Membership is open to all, and we welcome new members. Annual dues are \$10. For membership, make your check payable to LONG ISLAND BOTANICAL SOCIETY and mail to: Lois Lindberg, Membership Chairperson, 45 Sandy Hill Rd., Oyster Bay, NY 11771-3111

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Muttontown Lane
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